

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A personal computer, ~~comprising~~ including, but not limited to:
at least one microchip including at least one general purpose microprocessor with at least one control unit and at least two processing units on said at least one microchip;
at least one Faraday Cage surrounding ~~at least one portion of~~ said at least one microchip;
said at least one microchip including at least one inner firewall being configured to deny access to said at least one control unit from ~~[[said]]~~ at least one network of computers;
said at least one inner firewall being located between said at least one control unit and at least one of said at least two processing units;
said at least two processing units having at least one network connection to said at least one network of computers; and
said at least one network of computers including at least the Internet.
2. (Currently Amended) The personal computer of claim 1, wherein at least one operating system of said personal computer includes at least ~~a number of~~ two or more independent components, each component having its own said at least one inner firewall.
3. (Previously Presented) The personal computer of claim 1, wherein said at least one microchip includes at least one special purpose microprocessor.

4. (Previously Presented) The personal computer of claim 1, wherein said at least one microchip includes at least one personal computer system on said microchip.

5. (Currently Amended) The personal computer of claim 1, wherein said at least one microchip is at least ~~partly~~ surrounded by said at least one Faraday Cage optimized to shield against magnetic flux, including high frequency flux.

6. (Currently Amended) The personal computer of claim 1, wherein said at least one microchip is surrounded by said at least one Faraday Cage that is a continuous structure without holes.

7. (Previously Presented) The personal computer of claim 1, wherein said at least one microchip is surrounded by at least two Faraday Cages.

8. (Currently Amended) The personal computer of claim 1, wherein said at least one microchip is configured ~~[[for]]~~ to said at least one network connection including wave division multiplexing or dense wave division multiplexing.

9. (Currently Amended) The personal computer of claim 1, wherein said at least one microchip is configured ~~[[for]]~~ to said at least one network connection, said at least one ~~connecting~~ connection being wireless and including CDMA (code division multiple access) or wideband CDMA.

10. (Previously Presented) The personal computer of claim 1, wherein said at least one microchip includes at least two of said at least one inner firewall configured to operate within said personal computer, said personal computer configured to operate in said at least one network of computers;

at least a first of said at least one inner firewall is configured to deny access to at least said at least one control unit of said personal computer by at least one other computer through said at least one network connection with said personal computer during at least one shared operation; and

at least a second of said at least one inner firewall is configured to allow access to at least one of said at least two processing units of said personal computer by said at least one other computer through said at least one network connection with said personal computer during said at least one shared operation.

11. (Previously Presented) The personal computer of claim 1, wherein at least one configuration of said at least one inner firewall is configurable by at least one user of said personal computer or by at least one authorized network administrator.

12. (Previously Presented) The personal computer of claim 11, wherein at least one change in said at least one configuration of said at least one inner firewall is made, at least in part, by using field-programmable gate arrays (FPGA's).

13. (Previously Presented) The personal computer of claim 11, wherein at least one change in said at least one configuration of said at least one inner firewall involves at least one motherboard.

14. (Previously Presented) The personal computer of claim 11, wherein at least one change in said at least one configuration of said at least one inner firewall involves at least one manual switch.

15. (Previously Presented) The personal computer of claim 10, wherein said at least one firewall includes at least one hardware component.

16. (Previously Presented) The personal computer of claim 10, wherein said at least one firewall includes at least one software component.

17. (Previously Presented) The personal computer of claim 10, wherein said at least one firewall includes at least one firmware component.

18. (Previously Presented) The personal computer of claim 10, wherein said at least one shared operation is initiated by at least one user of said personal computer.

19. (Previously Presented) The personal computer of claim 10, wherein said at least one shared operation is initiated by said at least one other computer.

20. (Previously Presented) The personal computer of claim 10, wherein at least a part of said personal computer is idled by at least one user of said personal computer.

21. (Previously Presented) The personal computer of claim 10, wherein said at least one firewall denies access at least temporarily to at least one microprocessor of said personal computer by said at least one other computer through said at least one network connection during said at least one shared operation.

22. (Previously Presented) The personal computer of claim 10, wherein said at least one firewall allows access at least temporarily to at least one microprocessor of said personal computer by said at least one other computer through said at least one network connection during said at least one shared operation.

23. (Cancelled)

24. (Previously Presented) The personal computer of claim 10, wherein said at least one network of computers includes at least a World Wide Web.

25. (Previously Presented) The personal computer of claim 10, wherein said at least one network connection includes at least one optical fiber connection directly to said personal computer.

26. (Previously Presented) The personal computer of claim 10, wherein said personal computer is configured for a dense wave division multiplexing (DWDM) network connection.

27. (Previously Presented) The personal computer of claim 10, wherein said personal computer is configured to function as one of at least one master and at least one slave in said at least one shared operation.

28. (Previously Presented) The personal computer of claim 10, wherein said personal computer is configured to be controlled by at least one remote master controller.

29. (Previously Presented) The personal computer of claim 10, wherein said at least one shared operation is parallel processing and/or multitasking.

30. (Previously Presented) The personal computer of claim 10, wherein said at least one other computer is at least one other personal computer connected via at least one peer-to-peer connection to said personal computer.

31. (Cancelled)

32. (Cancelled)

33. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least four processing units.

34. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least eight processing units.

35. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 16 processing units.

36. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 32 processing units.

37. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 64 processing units.

38. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 128 processing units.

39. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 256 processing units.

40. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 512 processing units.

41. (Previously Presented) The personal computer of claim 10, wherein said at least one microchip has at least 1024 processing units.

42. (Previously Presented) The personal computer of claim 10, wherein said firewall is at least one hardware component.

43. (Currently Amended) The personal computer of claim 10, wherein [[said]] said at least one network connection is configured for at least one wireless connection.

44. (Previously Presented) The personal computer of claim 43, wherein said at least one wireless connection is to said at least one network of computers.

45. (Previously Presented) The personal computer of claim 10, wherein a part of an operating system of said personal computer includes at least two independent components, each component having its own said at least one inner firewall.

46. (Previously Presented) The personal computer of claim 10, wherein an application program of said personal computer includes at least two independent components, each component having its own said at least one inner firewall.

47. (Previously Presented) The personal computer of claim 10, wherein a part of an application program of said personal computer includes at least two independent components, each component having its own said at least one inner firewall.

48. (Previously Presented) The personal computer of claim 10, wherein power is interrupted to at least one network-accessible portion of at least one volatile memory of said personal computer to erase all files in said at least one network-accessible portion, said at least one network-accessible portion being located outside said at least one inner firewall.

49. (Previously Presented) The personal computer of claim 10, wherein all files are overwritten in at least one network-accessible portion of at least one non-volatile memory of said personal computer to erase all files, said at least one network-accessible portion being located outside said at least one inner firewall.

50. (Previously Presented) The personal computer of claim 1, wherein said at least one microchip includes at least two of said at least one inner firewall configured to operate within said personal computer, which is configured to operate in said at least one network of computers;
said at least one microchip including at least two memory hardware components;

at least a first of said at least one inner firewall is configured to deny access to at least a first of said at least two processing units and at least a first of said at least two memory hardware components of said personal computer by at least one other computer through said at least one network connection with said personal computer during at least one shared operation; and

at least a second of said at least one inner firewall is configured to allow access to at least a second of said at least two processing units and at least a second of said at least two memory hardware components of said personal computer by said at least one other computer through said at least one network connection with said personal computer during said at least one shared operation.

51. (Currently Amended) The personal computer of claim 50, wherein said at least one firewall is configured to deny access to at least said second of said at least two memory hardware ~~component~~ components of said personal computer by said personal computer during said at least one shared operation.

52. (Previously Presented) The personal computer of claim 50, wherein said first of said at least two memory hardware components is at least one hard drive device.

53. (Previously Presented) The personal computer of claim 50, wherein said first of said at least two memory hardware components is at least one flash memory device.

54. (Previously Presented) The personal computer of claim 50, wherein said second of said at least two memory hardware components is at least one flash memory device.

55. (Previously Presented) The personal computer of claim 50, wherein said second of said at least two memory hardware components is at least one random access memory (RAM) device.

56. (Previously Presented) The personal computer of claim 50, wherein said second of said at least two memory hardware components is at least one hard drive device.

57. (Previously Presented) The personal computer of claim 50, wherein said second of said at least two memory hardware components is at least one read-only compact disk drive (CD-ROM) device.

58. (Previously Presented) The personal computer of claim 50, wherein said second of said at least two memory hardware components is at least one read-only digital video disk drive (DVD) device.

59. (Currently Amended) The personal computer of claim 50, wherein said first of said at least two memory hardware components includes at least one [[BIOS]] Basic Input Output System (BIOS).

60. (Currently Amended) The personal computer of claim 50, wherein at least one user of said personal computer retains preemptive control of at least said second memory of said at least two memory hardware components.

61. (Previously Presented) The personal computer of claim 50, wherein at least one user of said personal computer retains preemptive control of all components of said personal computer.

62. (Cancelled)

63. (Previously Presented) The personal computer of claim 50, wherein said personal computer functions as at least one master in said at least one shared operation.

64. (Previously Presented) The personal computer of claim 50, wherein said personal computer functions as at least one slave in said at least one shared operation.

65. (Currently Amended) The personal computer of claim 50, wherein said second memory of said at least two memory hardware components is volatile memory.

66. (Currently Amended) The personal computer of claim 50, wherein said first memory of said at least two memory hardware components is non-volatile memory.

67. (Previously Presented) The personal computer of claim 66, wherein said non-volatile memory is at least one of a magnetic random access memory (MRAM) or ovonic unified memory microchip

68. (Currently Amended) The personal computer of claim 50, wherein said second memory of said at least two hardware components duplicates a first memory of said at least two memory hardware components.

69. (Currently Amended) The personal computer of claim 50, wherein said first memory of said at least two memory hardware ~~component~~ components is read and write memory.

70. (Currently Amended) The personal computer of claim 50, wherein said second memory of said at least two memory hardware components is read-only memory.

71. (Previously Presented) The personal computer of claim 50, wherein any hardware component, software file, or firmware file can have its own said at least one inner firewall.

72. (Previously Presented) The personal computer of claim 50, wherein at least two of a hardware component, a software file, or a firmware file can be grouped exclusively together inside said at least one inner firewall.

73. (Previously Presented) The personal computer of claim 1, wherein said at least one microchip includes at least two of said at least one inner firewall configured to operate within said personal computer, which is configured to operate in said at least one network of computers;

said at least one microchip including at least two memory hardware components;

at least a first of said at least one inner firewall is configured to deny access to at least a first of said at least two memory hardware component of said personal computer by another computer through said at least one network connection with said personal computer during at least one shared operation; and

at least a second of said at least one inner firewall is configured to allow access to at least a second of said at least two memory hardware components of said personal computer by said at least one other computer through said at least one network connection with said personal computer during said at least one shared operation.

74. (Cancelled)

75. (Cancelled)

76. (Previously Presented) The personal computer of claim 1, wherein said personal computer system is contained in said at least one microchip.

77. (Previously Presented) The personal computer of claim 76, wherein said personal computer system is contained in said at least one microchip having a more than one of said at least one general purpose microprocessor.

78. (Cancelled)

79. (Previously Presented) The personal computer of claim 1, wherein said personal computer is at least one appliance that includes at least one of a handheld personal digital assistant, a telephone, a pager, a television, a game, a videotape player/recorder, a video camera, a compact disk (CD) player/recorder, a digital video disk (DVD) player/recorder, a radio, a camera, a printer, a fax machine, and an automobile.

80. (Currently Amended) A personal computer, ~~comprising~~ including, but not limited to:
at least one microchip including at least one general purpose microprocessor with at least one photovoltaic cell located on said at least one microchip.

81. (Currently Amended) The personal computer of claim 80, wherein said general purpose microprocessor includes at least one control unit and at least two processing units;

said at least one microchip including at least one inner firewall ~~[[being]]~~ configured to deny access to said at least one control unit from said at least one network;

said at least one inner firewall ~~[[being]]~~ located between said at least one control unit and at least one of said at least two processing units;

said at least two processing units ~~[[being]]~~ connected to at least one network: and

said at least one network including at least the Internet.

82. (Currently Amended) A personal computer, ~~comprising~~ including, but not limited to:
at least one microchip including at least one general purpose microprocessor with at least one photovoltaic cell located on said at least one microchip; and

at least one Faraday Cage surrounding at least one portion of said at least one microchip.

83. (Currently Amended) The personal computer of claim 82, wherein said general purpose microprocessor includes at least one control unit and at least two processing units;

said at least one microchip including at least one inner firewall being configured to deny access to said at least one control unit from said at least one network;

said at least one inner firewall ~~[[being]]~~ located between said at least one control unit and at least one of said at least two processing units;

said at least two processing units ~~[[being]]~~ connected to at least one network: and

said at least one network including at least the Internet.

84. (Previously Presented) The personal computer of claim 1, wherein said at least one inner firewall includes at least one hardware component;

the at least one inner firewall being configured to allow and/or deny access to portions of the at least one microchip both to at least one user of the personal computer and to at least one user of the at least one microchip from at least one network of computers during at least one shared use of the at least one microchip.

85. (Previously Presented) The personal computer of claim 84, wherein the shared use comprises shared file resources and/or message passing.

86. (Previously Presented) The personal computer of claim 84, wherein the shared use includes unauthorized shared use, including intrusion by hackers from outside the personal computer.